

Alberta
Swine Improvement Program
1989
Annual Report



Agriculture
Canada



Alberta Swine Breeders
Association

1989 ANNUAL REPORT

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The Swine Improvement Program in Alberta is a joint Federal-Provincial program for both seedstock and commercial swine producers.

The performance testing program for breeding stock producers is a two part program consisting of:

1. An "on-farm" performance test for backfat and growth rate of boars and gilts performed by provincial government staff.
2. A central station test for measuring backfat and average daily gain of boars at either the Leduc or Lacombe test stations which are owned by Agriculture Canada and operated by the Alberta Swine Breeders Association (ASBA).

Commercial producers may use the ultrasonic home test program for the selection of boars and gilts within their herds providing they meet certain basic requirements.

The Sow Productivity and Management Program is available for either breeding stock or commercial operators to record production parameters of their sows on an individual and herd basis.

The Alberta Swine Improvement Advisory Committee (ASIAC) for 1989 consisted of the following members:

F.W. Schuld (Chairman), Head, Pork Industry Branch, Alberta Agriculture
G. Colpitts (Secretary), Program Officer, Implementation, Agriculture Development Branch, Agriculture Canada
A. Lange, Supervisor, Swine Improvement, Alberta Agriculture representative
C. Ormond, Alberta Agriculture appointed producer
B. Reiter, Alberta Agriculture appointed producer
W. Preugschas, Alberta Agriculture appointed producer
M. Roeske, Alberta Swine Breeders Association appointed producer
G. Matejka, Alberta Swine Breeders Association appointed producer
W. Weber, Alberta Swine Breeders Association appointed producer
A. Toles, Alberta Pork Producers Development Corporation representative
B. Milne, Western Hog Growers Association representative

Advisory Members:

Dr. F.X. Aherne, Swine Nutritionist, University of Alberta
Dr. A.P. Sather, Animal Geneticist, Lacombe Research Station
Dr. G. Finell, Administrator, Swine Herd Health Program, Alberta Agriculture

Ex-Officio Members:

K.J. Spiller, Director, Animal Industry Division, Alberta Agriculture
L. Usher, Agriculture Development Branch, Agriculture Canada

THE ALBERTA SWINE IMPROVEMENT PROGRAM - 1989
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Significant events in the Alberta Swine Improvement Program during 1989:

1. As of January 1, 1989, data for backfat and days was adjusted to 100 kg instead of 90. This was done at the request of the commercial industry. The desire of that industry is to see data which simulates the 100 kg market weight. Only 1988 and 1989 data was adjusted to 100 kg due to time constraints. At the test stations, the "on test" period is still between 30 and 90 kg.
2. All six technicians started to enter data into portable computers on farms April 1, 1989. This meant an end to writing probe sheets. Estimated Breeding Values (EBV's) were then generated on the spot for breeders on the program. EBV's use a statistical technique, called the BLUP system to separate the environmental from the genetic influences on a pig's performance traits. The system then estimates the genetic worth of each pig for a certain trait.
3. Test station data was calculated on the old phenotypic index and the new EBV system until August. After that, the EBV system was used exclusively to assess and rank boars.
4. The effect of fees for "on-farm" testing instituted in 1988 took their toll as commercial herds really cut back in the number of pigs tested (3,420 tested in 1988 vs. 1,781 in 1989). However, seedstock herds are testing at a strong pace with only a slight reduction in numbers (15,764 in 1988 vs. 14,204 in 1989). Thus so, the breeding stock production sector of the program is still strong.
5. The test station component of the program rebounded quickly after the Alberta Swine Breeders Association (ASBA) re-opened the Lacombe test station in December of 1988. The 839 boars tested at Leduc and Lacombe represent 87% utilization of total test station pen space.
6. The section called "Test Station Sire Summaries" has been omitted from this report. Instead Agriculture Canada now publishes quarterly sire and dam EBV's. These are available for each region (Western Canada, Ontario, Quebec and the Maritimes) in booklet form from Alberta Agriculture.
7. ASBA members cooperated closely with Dr. Austin Murray of the Lacombe Research Station during the year. Dr. Murray has successfully imported from Sweden, the technique of identifying halothane carriers by using blood markers. Consequently, ASBA instituted a policy of blood typing all progeny from known halothane carriers at the test station. Boars from these carriers had to be identified as being "clean" before being offered for sale. If they were not, they were culled and sold for slaughter along with halothane reactors that lived and their sibs.

PART A - GENERAL DATA

TABLE I

ALBERTA SWINE IMPROVEMENT PROGRAM
PERFORMANCE TESTING SUMMARY
1985 - 1989

<u>Boars Station</u> <u>Tested</u>	<u>1985</u> <u>@ 90 kg</u>	<u>1986</u> <u>@ 90 kg</u>	<u>1987</u> <u>@ 90 kg</u>	<u>1988</u> <u>@ 90 kg</u>	<u>1988</u> <u>@ 100 kg</u>	<u>1989</u> <u>@ 100 kg</u>
Number	794	638	652	574	574	839
Avg. Backfat (mm)	14.5	14.4	14.1	13.6	14.9	14.2
Avg. Daily Gain (30 - 90 kg)	0.92	0.91	0.90	0.90	0.90	0.93
Avg. Feed Conversion	2.41	2.48	2.47	2.44	2.44	2.44
Avg. Age (days)	145	144	145	143	152	151
<u>Boars Home Tested</u>						
Number	5,641	5,461	6,216	6,269	6,269	5,893
Avg. Backfat (mm)	14.3	13.8	13.3	13.0	14.2	13.9
Avg. Age (days)	157	155	154	163	163	165
TOTAL BOARS TESTED	6,435	6,035	6,868	6,843	6,843	6,732
<u>Gilts Home Tested</u>						
Number	12,474	11,651	12,931	12,915	12,915	10,092
Avg. Backfat (mm)	15.6	15.2	14.4	14.0	15.4	15.3
Avg. Age (days)	169	167	163	161	172	174
TOTAL PIGS TESTED	18,909	17,750	19,799	19,758	19,758	16,824

TABLE II

BOARS HOME TESTED
1979 - 1989

<u>YEAR</u>	<u>NUMBER TESTED</u>	<u>AVERAGE BACKFAT</u> (mm)	<u>AVERAGE AGE AT 90 KG (days)</u>
1979 @ 90 kg	3,937	15.0	172
1980 @ 90 kg	4,207	14.6	171
1981 @ 90 kg	4,201	14.4	166
1982 @ 90 kg	4,750	13.9	162
1983 @ 90 kg	5,851	13.9	159
1984 @ 90 kg	6,164	14.1	157
1985 @ 90 kg	5,641	14.3	157
1986 @ 90 kg	5,461	13.8	155
1987 @ 90 kg	6,216	13.3	154
1988 @ 90 kg	6,269	13.0	153
1988 @ 100 kg	6,269	14.2	163
1989 @ 100 kg	5,893	13.9	165

GILTS HOME TESTED

<u>YEAR</u>	<u>NUMBER TESTED</u>	<u>AVERAGE BACKFAT</u> (mm)	<u>AVERAGE AGE AT 90 KG (days)</u>
1979 @ 90 kg	9,988	16.0	177
1980 @ 90 kg	9,664	15.7	174
1981 @ 90 kg	9,778	15.8	174
1982 @ 90 kg	10,990	15.2	172
1983 @ 90 kg	11,809	14.8	167
1984 @ 90 kg	12,004	15.4	171
1985 @ 90 kg	12,474	15.6	169
1986 @ 90 kg	11,651	15.2	167
1987 @ 90 kg	12,931	14.4	163
1988 @ 90 kg	12,915	14.0	161
1988 @ 100 kg	12,915	15.4	172
1989 @ 100 kg	10,092	15.3	174

FIG. 1 NUMBERS TESTED - HOME TEST

BOARS AND GILTS BY YEAR

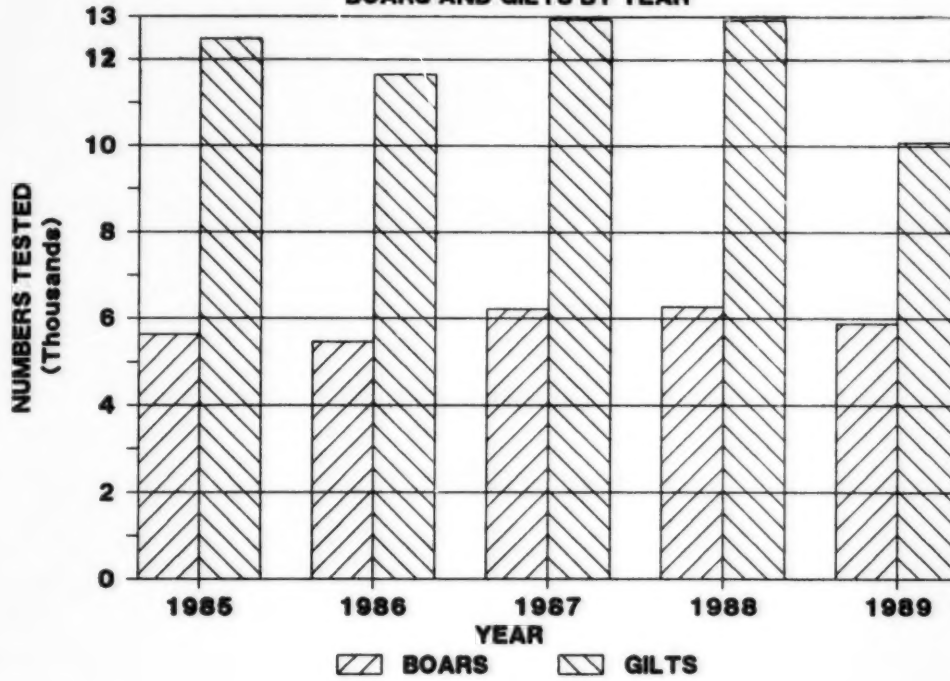


FIG. 2 BACKFAT - HOME TEST

BOARS & GILTS @ 100 KG.

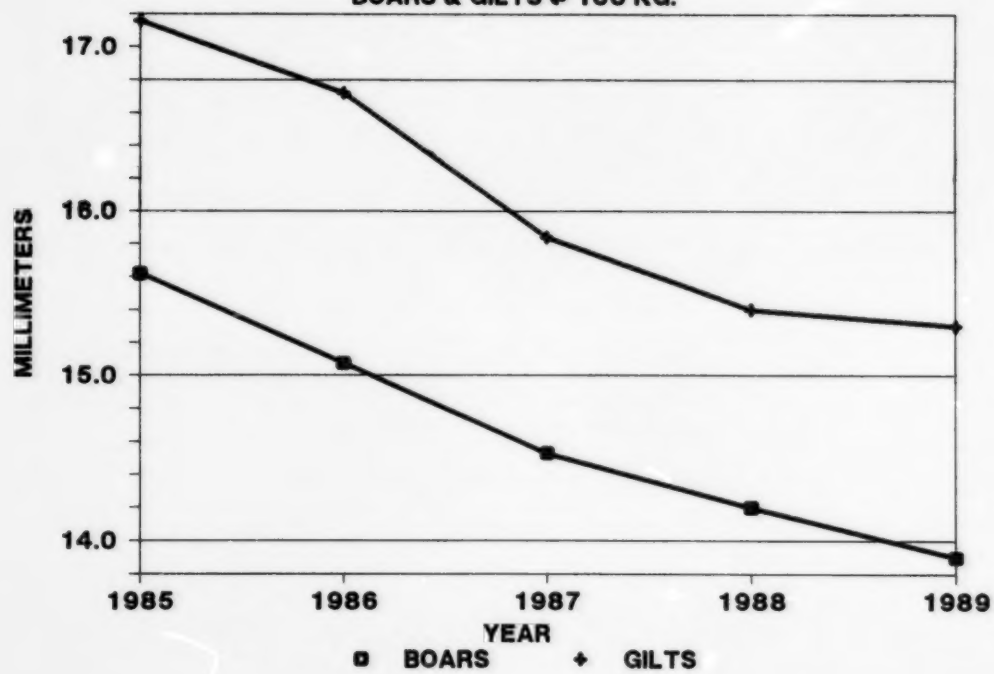
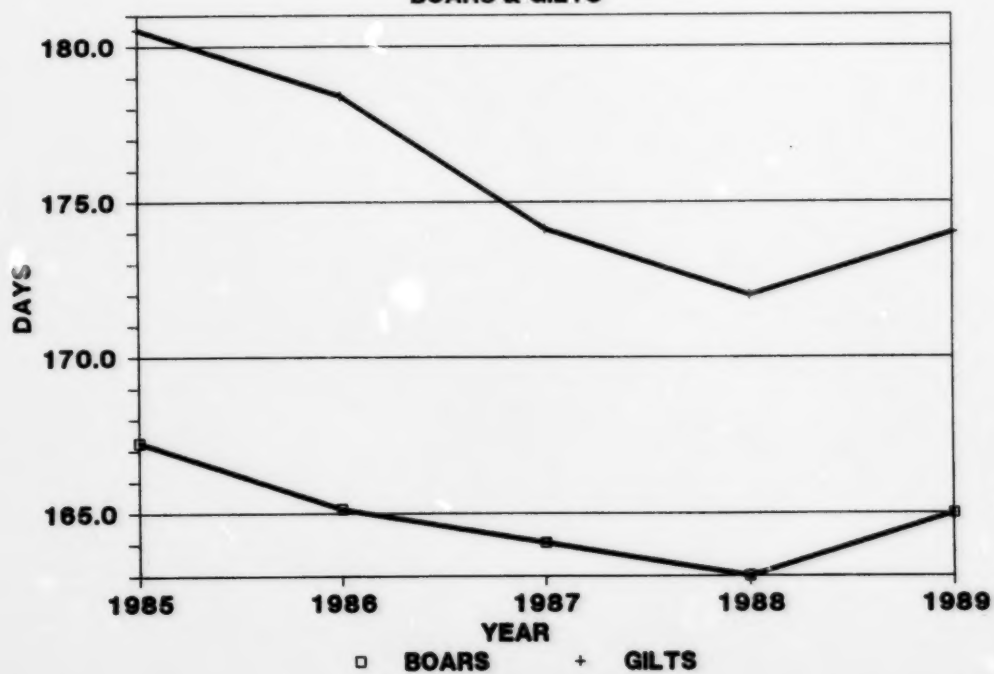


FIG. 3 AGE 100 KG - HOME TEST

BOARS & GILTS



YEARLY RATE OF GENETIC CHANGE FOR BACKFAT THICKNESS
AND AGE TO 100 KG IN WESTERN CANADIAN ROP SWINE POPULATION
FOR PIGS BORN FROM JANUARY 1987 TO DECEMBER 1989

<u>BREED</u>	<u>YORKSHIRE</u>	<u>LANDRACE</u>	<u>LACOMBE</u>	<u>HAMPSHIRE</u>	<u>DUROC</u>
Fat (mm)	- 0.6	0.00	0.00	0.01	0.20
Age (days)	-0.58	-0.68	-0.64	0.30	-0.22

The above data is calculated using the Best Linear Unbiased Prediction (BLUP) method.

NUMBER OF RECORDS USED AND BOARS AND SOWS EVALUATED
FOR EACH BREED IN WESTERN CANADA

<u>BREED</u>	<u>YORKSHIRE</u>	<u>LANDRACE</u>	<u>LACOMBE</u>	<u>HAMPSHIRE</u>	<u>DUROC</u>
Number of Records Used*	101,809	27,954	30,633	9,081	13,609
Number of Herds Represented*	275	170	74	116	125
Number of Boars and Sows Evaluated	17,162	4,578	3,829	1,981	3,079

* Includes all records and herds from 1975 to the present, from both the home and station test programs.

PART B - TEST STATION RESULTS

TABLE IV
1989 TEST STATION SUMMARY

LEDUC (NISKU) STATION

	<u>YORKSHIRE</u>	<u>LANDRACE</u>	<u>LACOMBE</u>	<u>HAMPSHIRE</u>	<u>DUROC</u>	<u>CROSSBRED</u>	<u>TOTAL</u>
Number Entered	317	126	40	32	16	8	539
Number Tested	308	126	39	31	16	8	528
Average Backfat at 100 kg (mm)	14.4	14.4	15.0	13.6	15.0	15.3	14.4
Average Daily Gain 30 - 90 kg (kg/day)	0.94	0.94	0.92	0.87	0.97	0.96	0.94
Feed Conversion (kg feed/kg gain)	2.35	2.42	2.43	2.52	2.38	2.41	2.38
Average Age @ 100 kg (days)	152	147	152	163	153	150	151
Number Culled	144	61	26	19	11	5	266
Number Unsold	64	22	8	4	1	1	100
Number Sold	109	43	6	9	4	2	173
Total Price	49,400	22,475	2,750	3,750	1,525	750	80,650
Average Price	455.21	522.67	458.33	416.67	381.25	375.00	466.18

TABLE IVa
1989 TEST STATION SUMMARY

LACOMBE STATION

	<u>YORKSHIRE</u>	<u>LANDRACE</u>	<u>LACOMBE</u>	<u>HAMPSHIRE</u>	<u>DUROC</u>	<u>CROSSBRED</u>	<u>TOTAL</u>
Number Entered	200	60	26	18	12	2	318
Number Tested	195	60	25	17	12	2	311
Average Backfat at 100 kg (mm)	13.6	14.1	15.3	12.9	13.2	20.5	13.9
Average Daily Gain 30 - 90 kg (kg/day)	0.93	0.90	0.93	0.86	0.99	0.91	0.93
Feed Conversion (kg feed/kg gain)	2.50	2.59	2.58	2.62	2.48	2.55	2.53
Average Age @ 100 kg (days)	152	148	150	162	150	143	151
Number Culled	88	37	17	11	3	2	158
Number Unsold	51	13	8	4	1	0	77
Number Sold	61	10	1	3	8	0	83
Total Price	30,450	4,225	325	1,050	3,125	0	39,175
Average Price	499.18	422.50	325.00	350.00	390.63	0	471.99

The Lacombe Test Station was re-opened by the Alberta Swine Breeders Association in December of 1988 but only half the barn was filled at that time. Thus, based on 2 pigs per pen, the testing capacity was only 320 boars, not the normal 384.

TABLE IVa
1988 TEST STATION SUMMARY

LEDUC (NISKU) STATION

	<u>YORKSHIRE</u>	<u>LANDRACE</u>	<u>LACOMBE</u>	<u>HAMPSHIRE</u>	<u>DUROC</u>	<u>CROSSBRED</u>	<u>TOTAL</u>
Number Entered	322	94	30	22	14	2	484
Number Tested	316	94	30	21	14	2	477
Average Backfat at 100 kg (mm)	14.6	15.2	14.6	15.3	15.9	14.7	14.8
Average Daily Gain 30 - 90 kg (kg/day)	0.89	0.89	0.91	0.94	0.87	0.80	0.89
Feed Conversion (kg feed/kg gain)	2.41	2.50	2.45	2.46	2.49	2.55	2.44
Average Age @ 100 kg (days)	153	150	151	156	153	154	152
Number Culled	170	50	15	15	11	2	263
Number Unsold	37	9	5	0	2	0	53
Number Sold	115	35	10	7	1	0	168
Total Price	55,800	16,400	4,500	2,850	400		79,950
Average Price	485.22	468.57	450.00	407.14	400.00		475.89

TABLE IVa
1988 TEST STATION SUMMARY

LACOMBE STATION

	<u>YORKSHIRE</u>	<u>LANDRACE</u>	<u>LACOMBE</u>	<u>HAMPSHIRE</u>	<u>DUROC</u>	<u>CROSSBRED</u>	<u>TOTAL</u>
Number Entered	68	14	6	8	2	0	98
Number Tested	67	14	6	8	2	0	97
Average Backfat at 100 kg (mm)	14.9	15.2	15.9	16.3	18.3		15.2
Average Daily Gain 30 - 90 kg (kg/day)	0.90	0.93	0.95	0.92	0.86		0.91
Feed Conversion (kg feed/kg gain)	2.43	2.50	2.49	2.45	2.51		2.44
Average Age @ 100 kg (days)	153	145	153	142	147		151
Number Culled	38	5	1	6	2		52
Number Unsold	4	2	1				7
Number Sold	26	7	4	2			39
Total Price	16,375	3,775	1,475	900			22,525
Average Price	629.81	539.29	368.75	450.00			577.56

TABLE V
CULLING INFORMATION
REASONS FOR CULLING: 1989 AND 1988

	LEDUC TEST STATION				LACOMBE TEST STATION			
	<u>1989</u>	<u>***</u>	<u>1988</u>	<u>***</u>	<u>1989</u>	<u>***</u>	<u>1988</u>	<u>***</u>
Total Culled*	266	49.4	263	54.0	158	49.7	52	53.0
Performance	207	38.4	206	42.6	106	33.3	41	41.8
Feet and Legs	35	6.5	28	5.8	23	7.2	10	10.2
Underline***								
Small Testicles	2	0.4	2	0.4	2	0.6		
Rupture	2	0.4						
Abscess								
Died	5	0.9	4	0.8				
Shaking			5	1.0	4	1.3	1	1.3
Returned to Breeder			3	0.6				
Bloody Urine								
Ridgling	2	0.4			1	0.3		
Enlarged Sheath	1	0.2	2	0.4				
Ulcers			1	0.2				
Prolapsed Anus								
Undershot Jaw								
Illness	3	0.6	4	0.8	3	0.9		
Lack of Condition	2	0.4	1	0.2	2	0.6		
Sent to Lab								
Halothane Reactors	4	0.7			5	1.6		
Halothane Sibs****	2	0.4			6	1.9		
Halothane Carrier****	1	0.2			3	0.9		
Other			7	1.4	3	0.9		
TOTAL ENTERED	539		484		318		98	

* Total pigs culled may be for one or more reasons.

** % shown is calculated as a proportion of total pigs entered.

*** Boars with defective underlines are not culled but moved to the end of the sale order and announced as such to the buyers.

**** In 1989, sibs of halothane reactors were not castrated, but fed out then marketed for slaughter. Also, progeny from known halothane carriers were blood typed and had to be "clean" before being sold or otherwise were culled.

TABLE VI
TEST STATION
BOAR SALE ACTIVITY IN ALBERTA
1979 - 1989

YEAR	LOCATION	NUMBER SOLD	TOTAL SALES (\$)	AVERAGE PRICE (\$)
1989	Leduc	173	80,650	466.18
	Lacombe	83	39,175	471.99
1988	Leduc	168	79,950	577.56
The Lacombe station was closed March 31 to December 1, 1988.				
1987	Leduc	120	61,875	515.63
	Lacombe	<u>118</u>	<u>59,285</u>	<u>502.42</u>
		238	121,160	509.08
1986	Leduc	111	55,835	503.02
	Lacombe	<u>109</u>	<u>54,650</u>	<u>501.38</u>
		220	110,485	502.20
1985	Leduc	81	34,055	420.42
	Lacombe	<u>105</u>	<u>48,360</u>	<u>460.57</u>
		186	82,415	443.09
1984	Leduc	129	61,435	476.24
	Lacombe	<u>138</u>	<u>68,470</u>	<u>496.16</u>
		267	129,905	486.54
1983	Leduc	95	40,160	422.74
	Lacombe	<u>128</u>	<u>60,355</u>	<u>471.52</u>
		223	100,515	450.74
In 1983, Leduc station missed one fill due to interior renovations.				
1982	Leduc	143	63,765	445.91
	Lacombe	<u>136</u>	<u>69,235</u>	<u>509.08</u>
		279	133,000	476.70
1981	Leduc	77	35,435	460.19
	Lacombe	<u>154</u>	<u>81,930</u>	<u>532.01</u>
		231	117,365	508.07
1980	Leduc	100	38,190	382.00
	Lacombe	<u>135</u>	<u>66,590</u>	<u>493.00</u>
		235	104,780	437.50
1979	Leduc	113	45,605	403.58
	Lacombe	<u>175</u>	<u>85,500</u>	<u>488.57</u>
		288	131,105	455.23

PART C: HOME TEST RESULTS

TABLE VII
ALBERTA SWINE HOME TESTING ACTIVITY - 1989 SUMMARY

NUMBER OF PIGS TESTED PER FARM	NUMBER OF BREEDERS	% OF BREEDERS	TOTAL NUMBER OF PIGS	% OF PIGS
20 or less	3	5	31	0.2
20 - 50	10	18	390	2.4
51 - 100	8	14	569	3.6
101 - 200	8	15	1,157	7.2
201 - 500	14	26	3,829	24.0
501 - 1000	9	16	6,489	40.6
1001 +	3	5	3,520	22.0
TOTAL	55	100.0	15,985	100.0

TABLE VII (a)
ALBERTA SWINE HOME TESTING ACTIVITY - 1988 SUMMARY

NUMBER OF PIGS TESTED PER FARM	NUMBER OF BREEDERS	% OF BREEDERS	TOTAL NUMBER OF PIGS	% OF PIGS
20 or less	11	15	91	0.5
20 - 50	9	12	290	1.5
51 - 100	8	11	593	3.0
101 - 200	15	21	2,112	11.0
201 - 500	17	23	4,785	25.0
500 & over	13	18	11,313	59.0
TOTAL	73	100.0	19,184	100.0

TABLE VIII
HOME TESTED BOARS - BY BREED

BREED	NUMBER TESTED	<u>1989</u>		NUMBER TESTED	<u>1988</u>	
		AVERAGE BACKFAT	AVERAGE AGE		AVERAGE BACKFAT	AVERAGE AGE
		@ 100 KG	@ 100 KG		@ 100 KG	@ 100 KG
		(MM)	(DAYS)		(MM)	(DAYS)
Yorkshire	2186	13.9	166	2478	14.2	164
Landrace	854	13.8	160	802	14.0	158
Lacombe	454	14.4	164	664	15.5	157
Hampshire	418	13.2	184	414	13.3	178
Duroc	347	14.4	164	303	14.5	166
Red Wattle	40	17.2	193	24	21.4	191
Crossbred	1594	13.7	160	1584	14.0	161
TOTAL	5893	13.9	165	6269	14.2	163

TABLE IX
HOME TESTED GILTS - BY BREED

BREED	NUMBER TESTED	<u>1989</u>		NUMBER TESTED	<u>1988</u>	
		AVERAGE BACKFAT	AVERAGE AGE		AVERAGE BACKFAT	AVERAGE AGE
		@ 100 KG	@ 100 KG		@ 100 KG	@ 100 KG
		(MM)	(DAYS)		(MM)	(DAYS)
Yorkshire	3097	15.8	174	3199	15.1	171
Landrace	1183	14.7	165	1143	14.9	164
Lacombe	529	15.8	169	824	16.6	163
Hampshire	442	14.4	187	378	13.9	182
Duroc	267	15.8	173	211	15.9	166
Red Wattle	46	18.6	200	34	23.9	198
Crossbred	4528	15.1	176	7126	15.5	175
TOTAL	10,092	15.3	174	12915	15.4	172

TABLE X
SEEDSTOCK FARMS
42 Active Herds

BREED	NUMBER TESTED	<u>BOARS</u>		NUMBER TESTED	<u>GILTS</u>	
		AVERAGE	AVERAGE		AVERAGE	AVERAGE
		BACKFAT	AGE		BACKFAT	AGE
		@ 100 KG (MM)	@ 100 KG (DAYS)		@ 100 KG (MM)	@ 100 KG (DAYS)
Yorkshire	2183	13.9	166	3039	15.8	174
Landrace	850	13.8	159	1179	14.7	165
Lacombe	454	14.4	164	529	15.8	169
Hampshire	418	13.2	184	442	14.4	187
Duroc	342	14.5	164	265	15.8	170
Red Wattle	40	17.2	193	46	18.6	200
Crossbred	1506	13.7	160	2911	15.0	171
TOTAL	5793	13.9	165	8411	15.3	172

COMMERCIAL FARMS
13 Active Herds

Yorkshire	3	14.1	174	58	14.9	179
Landrace	4	12.2	172	4	14.2	190
Lacombe						
Hampshire						
Duroc	5	12.6	166	2	16.7	185
Red Wattle						
Crossbred	88	13.9	161	1617	15.4	183
TOTAL	100	13.8	162	1681	15.4	183
OVERALL						
TOTALS	5893	13.9	165	10092	15.3	174

TABLE XI

HOME TEST AVERAGES BY SEX AND BREED

As feeding management and environmental factors under which pigs are home tested can vary significantly between the various herds, and since limited numbers do not reflect true averages, the following herd averages should not be considered as a total measure of the genetic merit of the pigs tested in each herd. All pigs listed under BREEDER heading are purebred (P) unless marked (G) for grade or straightbred.

SEEDSTOCK HERDS
YORKSHIRE

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Acadia Breeders	M	129	14.0	158
	F	154	15.3	165
Arychuk, D.	M	5	14.8	153
	F	1	15.5	160
Barrett, R.	M	29	14.4	156
	F	46	14.9	166
Bloomsbury Farms	M	163	15.1	156
	F	155	17.4	160
Blue Diamond Enterprises	M	3	15.2	163
	F	9	17.6	176
Braat, J.	M	89	12.6	153
	F	180	13.4	164
Bugeaud, B.	M	4	19.4	173
	F	2	22.2	181
Brownlee, J.	M	73	14.6	184
	F	74	15.6	190
Chauvet, M.	F	8	16.0	183
Deschner Hog Farm	M	12	13.0	184
	F	2	13.6	192
Eidse, L.	M	17	14.8	161
	F	58	16.8	171
Eringsfeld, B.	M	42	14.8	193
	F	83	16.0	203

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Five Lakes Farms	M	310	13.4	187
	F	336	13.8	189
Gilt Line Farm	M	34	13.9	174
	F	78	14.3	176
Groot, C. (G)	M	13	13.3	161
	F	21	14.6	172
Gwynne Vista Farm	M	131	13.6	173
	F	225	14.1	183
Huvenaars, A.	M	77	14.1	166
	F	89	13.8	179
Knobben, G.	M	20	13.8	172
	F	18	14.2	178
Knobben, J.	M	30	13.0	164
	F	45	14.1	175
Maschmeyer, G.	M	133	15.4	158
	F	178	15.9	168
Matejka, G.	M	209	12.3	160
	F	194	13.0	176
Milne, B.	M	160	12.5	156
	F	183	13.1	163
Neufeld Farms (P & G)	M	21	14.2	155
	F	19	13.6	162
Norest Farms	M	39	14.7	179
	F	65	15.9	185
Papenhuyzen, C.	M	38	15.6	182
	F	39	17.1	188
Reiter Farms	M	135	13.6	157
	F	293	14.6	166
Roeske, M.	M	75	14.8	153
	F	231	15.0	172
Thiessen, R.	M	40	15.6	168
	F	51	16.9	167

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Turko, D.	M	36	16.3	166
	F	48	17.2	166
Vandenberg, J.	M	68	15.4	164
	F	34	16.5	165
Wakeena Farm	M	3	14.3	186
Wilhelm, L.	M	15	15.4	176
	F	37	16.1	172
Weber Farms	M	30	14.6	165
	F	83	15.9	174
TOTALS	M	2183	13.9	166
	F	3039	15.8	173

SEEDSTOCK
LANDRACE

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Acadia Breeders	M	178	12.6	158
	F	222	13.8	163
Alder, E.	F	9	17.7	165
Barrett, R.	M	54	13.9	149
	F	84	14.7	159
Blue Diamond Enterprises	M	11	16.9	148
	F	23	18.2	160
Braat, J.	M	23	14.2	146
	F	41	14.8	155
Deschner Hog Farm	M	6	15.1	171
	F	4	16.6	180
Duff, D.	M	83	14.8	154
	F	172	15.9	158
Eringfeld, B.	M	1	10.0	204
	F	2	17.6	203
Gilt Line Farm	M	18	13.4	159
	F	18	15.8	165
Groot, G. (G)	F	3	14.3	171
Huvenaars, A.	M	25	15.5	166
	F	33	16.3	170
Knobben, G.	M	13	12.6	166
	F	16	13.7	173
Knobben, J.	M	5	12.5	176
	F	5	13.0	185
Lakeland College	M	132	13.2	165
	F	149	14.1	174
Maschmeyer, G.	M	46	15.5	153
	F	50	16.6	156
Matejka, G.	M	41	12.1	151
	F	19	13.5	162

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Milne, B.	M	63	12.6	152
	F	122	12.7	161
Neufeld Farms (P & G)	M	12	13.0	149
	F	3	14.2	150
Norest Farms	M	51	16.5	180
	F	41	17.9	191
Papenhuyzen, C.	M	3	14.5	179
	F	3	13.5	189
Papenhuyzen, C.W. (Jr).	M	4	13.3	196
	F	2	15.4	201
Reiter Farms	M	52	13.8	155
	F	123	14.0	167
Thiessen, R.	M	22	16.0	166
	F	26	15.9	169
Wakeena Farm	M	7	14.6	181
	F	9	15.7	177
TOTALS	M	850	13.8	159
	F	1179	14.7	165

SEEDSTOCK
LACOMBE

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Bloomsbury Farms	M	272	15.1	152
	F	319	16.5	156
Five Lakes Farms	M	90	13.3	187
	F	84	14.5	192
Gwynne Vista Farms	M	92	13.5	176
	F	126	14.7	186
TOTALS	M	454	14.4	164
	F	529	15.7	169

SEEDSTOCK
HAMPSHIRE

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Arychuk, D.	F	2	12.7	171
Bloosmbury Farms	M	85	13.7	166
	F	91	14.6	170
Braat, J.	M	26	14.6	149
	F	40	16.2	159
Bugeaud, B.	M	12	14.8	174
	F	8	16.5	176
Brownlee, J.	M	49	13.3	202
	F	36	13.7	205
Deschner Hog Farm	M	7	13.9	189
	F	5	13.6	205
Five Lakes Farms	M	138	12.9	201
	F	107	13.5	209
Gwynne Vista Farms	M	2	11.8	186
	F	7	14.3	182
Lakeland College	F	1	11.5	184
Leaning Spruce	M	24	11.6	178
	F	28	13.5	187
Matejka, G.	M	2	13.2	162
Norest Farms	M	2	12.7	189
	F	2	14.0	187
Papenhuyzen, C.	M	37	12.1	187
	F	55	15.1	193
Reiter Farms	M	31	14.1	166
	F	53	14.0	172
Turko, D.	M	3	15.3	188
	F	7	17.8	190
TOTALS	M	418	13.2	184
	F	442	14.4	187

SEEDSTOCK
DUROC

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Braat, J.	M	21	13.9	159
	F	25	16.4	162
Deschner Hog Farm	M	3	12.3	194
	F	1	13.3	206
Eidse, L.	M	3	13.7	155
	F	7	16.3	165
Gilt Line Farm	M	1	12.1	166
	F	7	14.2	173
Lakeland College	M	10	13.4	165
	F	10	13.9	179
Maschmeyer, G.	M	83	15.3	162
	F	69	16.4	168
Matejka, G.	M	32	12.6	166
	F	22	14.0	175
Milne, B.	M	18	12.4	158
	F	15	13.3	167
Neufeld Farms	M	23	14.0	160
	F	2	15.0	166
Papenhuyzen, W.	M	32	14.3	172
	F	28	16.0	181
Reiter Farms	M	28	15.3	158
	F	43	16.2	170
Thiessen, R.	M	14	14.7	173
	F	9	15.9	172
Vandenberg, J.	M	74	15.1	164
	F	27	16.6	166
TOTALS	M	342	14.5	164
	F	265	15.8	170

SEEDSTOCK
RED WATTLE

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Penalta Farm	M	40	17.2	193
	F	46	18.6	200
TOTALS	M	40	17.2	193
	F	46	18.6	200

SEEDSTOCK SECTION
COMMERCIAL, CROSSBRED OR STRAIGHTBRED (GRADE) PIGS

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 10KG (DAYS)
Acadia Breeders	M	24	12.2	151
	F	21	12.8	157
Alder, E.	M	1	13.8	154
	F	12	19.6	169
Barrett, R.	M	1	14.2	142
	F	6	13.1	151
Bloomsbury Farms	M	108	15.2	148
	F	184	16.9	154
Blue Diamond Enterprises	M	10	17.3	159
	F	25	16.7	168
Braat, J.	M	70	13.8	149
	F	109	14.6	159
Chauvet, M.	F	33	14.6	185
Deschner Hog Farm	M	127	13.1	180
	F	127	15.5	187
Eidse, L.	F	34	16.6	164
Eringfeld, B.	F	16	16.3	210
Gilt Line Farm	F	238	16.2	166
Groot, C.	M	67	14.5	159
	F	197	14.8	170
Gwynne Vista Farm	M	1	17.1	194
	F	238	15.2	179
Huvenaars, A.	M	8	16.3	161
	F	5	14.4	168
Lakeland College	M	3	12.7	165
	F	34	14.8	169
Maschmeyer, G.	M	12	14.8	150
	F	3	15.8	163
Matejka, G.	M	5	12.8	156
	F	4	12.9	161

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Meadowview Livestock	F	193	16.8	186
Milne, B.	M	9	12.2	158
	F	191	13.0	158
Neufeld Farms	M	100	14.4	150
	F	1	18.9	155
Ranchview "B"	M	218	13.1	168
	F	751	14.1	177
Ranchview Test	M	664	13.4	159
	F	414	14.7	167
Reiter Farms	M	30	14.9	150
Thiessen, R.	M	7	15.8	159
	F	67	16.6	167
Vandenberg, J.	M	41	15.3	153
	F	3	17.3	158
Weber Farms	F	5	15.6	162
TOTALS	M	1506	13.7	160
	F	2911	15.0	171

COMMERCIAL HERDS
YORKSHIRE (P & G)

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Baert, M.	F	5	12.8	177
Huttenville Colony	F	19	16.0	172
Tersteeg Farms	M	3	14.1	174
	F	34	14.6	183
TOTALS	M	3	14.1	174
	F	58	14.9	179

LANDRACE (P & G)

Huttenville Colony	M	2	10.7	172
	F	1	13.5	184
Slingerland, W.	M	2	13.7	171
Tersteeg Farms	F	3	14.4	192
TOTALS	M	4	12.2	171
	F	4	14.2	190

DUROC (P)

Baert, M.	M	5	12.6	166
TOTALS	M	5	12.6	166

CROSSBRED OR COMMERCIAL PIGS

Baert, M.	M	11	12.6	158
	F	51	14.4	161
Fairview College	F	4	11.3	188
Gollnick Farms	M	48	14.3	169
	F	647	14.7	176
Halcyon Farm	F	29	13.6	182

BREEDER	SEX	NUMBER TESTED	AVERAGE BACKFAT (MM) @ 100 KG	AGE TO 100 KG (DAYS)
Huttenville Colony	M	5	15.5	157
	F	11	17.3	167
Isaac, H.	F	29	17.1	210
Lenz Farms	F	109	17.1	179
Little, J.	F	111	16.4	197
Northern Lights	F	25	14.4	202
Olds College	F	371	16.3	172
Plain Lake Colony	F	28	19.0	186
Slingerland, W.	M	24	13.3	147
	F	38	13.6	162
Tersteeg Farms	F	164	14.5	184
TOTALS	M	88	13.9	161
	F	1617	15.4	183

TABLE V
SOW PRODUCTIVITY AND MANAGEMENT PROGRAM
42 Active Herds

	<u>YORKS</u>	<u>LAND</u>	<u>LAC</u>	<u>HAMP</u>	<u>DUROC</u>	<u>REDS</u>	<u>COMM</u>	<u>TOTAL</u>
Litters Weaned	1,722	638	243	218	53	7	3,737	6,618
Pigs Weaned	14,971	5,637	1,958	1,613	391	48	33,571	58,189
Services/Farrowing	1.1	1.1	1.0	1.1	1.0	1.3	1.1	1.1
Farrowing Interval (Days)	161	156	171	165	153	157	156	158
Weaning to Conception (Days)	16.0	12.0	28.8	20.0	10.0	15.2	13.3	14.6
Total Born/Litter	10.7	10.9	10.1	9.6	11.1	9.3	11.0	10.8
Born Live/Litter	9.6	9.8	8.9	8.5	9.6	7.7	9.9	9.7
Pre-Wean Mortality (%)	11.9	11.8	14.8	16.8	21.1	14.5	10.4	11.4
Pigs Weaned/Litter	8.7	8.8	8.1	7.4	7.4	6.9	9.0	8.8
Litters/Sow/Year	2.3	2.3	2.1	2.2	2.4	2.3	2.3	2.3
Pigs Weaned Per Sow Per Year	20.0	20.2	17.0	16.3	17.8	15.9	20.7	20.2
Kg of Pigs at 21 Days Per Sow Per Year	116.4	127.0	108.6	92.6	95.8	73.6	121.7	119.6

REDS - Red Wattle

The herds which are on the Sow Productivity Program are not necessarily the same ones that are on the performance testing program.